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ABSTRACT

A 2-year study of 18 schools across Oregon was conducted to provide descriptive information about the effects of supported education on students with and without Individualized Education Plans (IEPs). Regular classroom teachers and their supporting special education staff volunteered to teach and score performance tasks in their supported education classes. A total of 103 regular and special education teachers were involved and the study collected portfolios with student performance information for 275 students with IEPs and 296 students without IEPs. Results of the study found: (1) the students with IEPs scored higher on performance assessment tasks than on transitional standardized assessments; (2) in several content areas, performance scores of high school students with IEPs were significantly higher than elementary school students with IEPs, while the performance scores of students without IEPs remained constant; (3) the students with IEPs scored lower than students without IEPs on performance tasks; and (4) performances tasks were an effective method for increasing collaboration between special education and regular education and for providing needed feedback to students with special needs about their performance in the regular class. Recommendations are provided for using performance assessment tasks in supported education classrooms. (CR)

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ED 408 794

A FULL EVALUATION STUDY OF THE OREGON SUPPORTED EDUCATION PLAN AND ITS IMPACT UPON STUDENT OUTCOMES: FINAL REPORT

(Grant Award H159A40016)

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EXECUTIVE SUMMARY

A study was conducted over two years with eighteen schools across Oregon, as part of the Performance Assessment and Supported Education Training and Evaluation Project. The purpose of the study was to provide descriptive information about the effects of Supported Education on students with and without IEPs. Specifically, regular classroom teachers and their supporting special education staff volunteered to teach and score performance tasks in their supported education classes. Thus, the project could describe direct classroom outcomes for all students in a supported education environment.

Sample and Data Sources

Eleven elementary schools and seven high schools from seventeen school districts participated in the two year study. A total of 103 regular and special education teachers were involved. The study design called for four 10th grade regular classroom teachers to participate at each high school, two 3rd grade and two 5th grade classroom teachers at each elementary school, and the special education teachers/assistants that normally provide support to the students with IEPs. Each participating school designated one person to serve as a data coordinator to assist project staff to collect necessary school information.

Four sources of data were collected from each participating school. The sources were: a) classroom performance-based assessment data, b) standardized assessments currently administered by schools, c) school records of student performance *(e.g., grades, attendance, gender, age)*, and d) school surveys of participating teachers *(i.e., perceptions of supported education and evaluation of performance tasks)*. The study collected portfolios with this information for 275 students with IEPs and 296 randomly selected students without IEPs.

Study Questions

As a result of this study, the following questions are being answered:

1. *What are the student characteristics and performance assessment outcomes of students with and without IEPs in Oregon schools implementing supported education?*

2. *What supported education implementation factors and teacher-perceived student outcomes are related to direct measures of student performance outcomes?*

3. *What is the viability of using a performance assessment data collection system for the on-going evaluation of supported education and to assist in the development and monitoring of student IEP goals and objectives?*

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Performance Assessment Methods

During the instructional delivery phase, each classroom teacher developed and implemented a sample classroom performance task in either the Social Science area or in the Science area. Each classroom teacher and collaborating special educator scored approximately ten of their students (three-five students with IEPs and an equal number of students without IEPs) on the CIM content areas as well as in two additional content areas: a) Write, and b) Speak. In addition, teachers rated their students on Self-Directed Learning and Collaboration. As part of the study, each performance task required each student to: (a) write at least one paper, (b) make one oral presentation, (c) spend some time working in a group, and (d) direct or manage their own learning. Table 1 shows the content areas assessed as part of this study.

Table 1 - Performance Task Content Areas

Teacher teams implemented a performance task from either: or	
Science	Social Science
Based upon their choice, teachers scored students in the following areas:	
Apply Science	Issue Analysis
Write	Write
Speak	Speak
Teachers also rated students in the following areas:	
Collaborate	Collaborate
Self-Directed Learning	Self-Directed Learning

Performance Assessment Tasks

Table 2 lists a few participating elementary and high schools showing the names of the performance tasks they implemented. Some tasks were implemented in more than one classroom as teachers collaborated within and between grade levels at a given school. The schools represent a variety of urban, suburban, and rural schools from Oregon, and the performance tasks provide a broad representation of topics from Social Studies and Science areas. Topics ranged from selecting which foreign languages should be offered, to creating inventions with magnetism.

Table 2 - Sample Listing of Schools and Their Performance Tasks

Elementary School	**Performance Tasks Implemented**
Buckingham *(Bend)*	*Which foreign language should be taught? *Should toy guns be made and sold for profit? *Science research project *Earth and sea investigation
Robert Frost *(Silverton)*	*Inventions with magnetism *Inventions - simple machines *Resourcefully yours
Raleigh Park *(Beaverton)*	*Should dams be built on the Columbia River? *Water, water everywhere
High School	**Performance Tasks Implemented**
Forest Grove	*Build a dream house *Family history interview *Create a cell model and diffusion/osmosis lab
Ontario	*Science experiment: reviewed *The hero's journey *Reports on South America *Animal project
Reynolds *(Troutdale)*	*DNA and Genetics study *Columbia Gorge geology project *Community service project *History Studies: WWI, WWII, Imperialism

Results

Initial results show that as expected, the students without IEPs scored higher than the students with IEPs on both classroom performance tasks and on standardized assessments. However, the **students with IEPs in this study, on average, received performance scores of approximately 3.0 on a scale from 1 to 6. The non-scores averaged near 4.0. The gap between these average performance scores for students with and without IEPs, was much smaller than the gap on their standardized assessment measures.** Students with IEPs only scored at 40% of students' without IEPs scores on standardized assessments, but scored at 80% of students' without IEPs scores on performance assessments. This indicates the possibility that modifications and adaptations do have a positive effect for students with IEPs.

In several performance content areas, students with IEPs showed significant gains from elementary school to high school, while the scores for students without IEPs remained level from elementary to high school. One example of this was in the Science and Math content area. Students with IEPs scored an average of 2.55 at the elementary level but a significantly higher 3.14 at the high school level. Students without IEPs showed a small but non-significant improvement.

Teachers reported providing support to students with IEPs in the form of instructional modifications and adaptations during the implementation of the performance tasks. At the elementary school level, they included: verbal prompts and cues, adults reading forms aloud, and 1:1 assistance on organization and research. Examples of modifications/adaptations used at the high school level were: prodding, reduced amount of work, explanation of concepts, and assistance with organization, proofing, and research.

Teachers identified a number of benefits their performance task had on their classroom. Benefits included: a) all students worked together on the same tasks, b) a time for reflection was provided for students and teachers, and c) parental involvement was higher in the elementary setting. In addition to these benefits, teachers identified potential problems associated with performance tasks in supported education classrooms. For example, they indicated that many tasks take a lengthy time to implement, and it may be difficult to meet other non-academic IEP goals, especially for students with major needs. They also indicated that while performance scores provide a lot of information about a student, they do require a considerable amount of teacher time. Teacher opinions and data results contradict the commonly voiced concern that students without IEPs receive less support and therefore perform lower academically due to the inclusion of the students with IEPs. Results in this study showed that students without IEPs typically received high scores and teachers indicated these students performed as well or better than in traditional classroom activities.

Discussion

Numerous districts and ESDs in Oregon are struggling with the assessment of students with special education needs in terms of progress on the Oregon Benchmarks and Content Standards. Teachers have struggled for a number of years with the evaluation of student outcomes. Many special educators' perceptions are that students with special needs will not achieve a CIM and therefore do not need to participate in the CIM assessment process. Our initial findings in the performance assessment area are far more positive than negative. We have found that students with IEPs score proportionately higher on performance assessment tasks than on traditional standardized assessments. We have also found that in some content areas, performance scores of high school students with IEPs, are significantly higher than elementary school students with IEPs. At the same time the students' without IEPs performance scores remain constant between elementary and high school. However, it is true that students with IEPs score lower than students without IEPs on performance tasks. As districts begin to implement assessment procedures leading to the awarding of the CIM, many students, both with and without IEPs, may not meet the standards. This should not stop us from including all students in the assessment process.

Our research also has found that performance tasks are an effective method for increasing collaboration between special education and regular education and for providing needed feedback to students with special needs about their performance in the regular class. Special and regular educators need to learn to work together effectively and to collaborate. Performance assessment provides a clear mechanism to do this. The scoring guides can be a communication tool between regular and special education teachers and their students. The criteria established on the scoring guides allows the regular and special education teachers, as well as the student, to know what to work on, what is important, and what is required.

Working together, special educators, classroom teachers, and higher educators can become familiar with the use of performance assessment and scoring guides in the regular education classroom for the benefit of all students. The assessment of students using performance assessment in the regular classroom, at benchmarks for content standards, is an opportunity to better understand students' levels of performance in realistic settings and to further the development of evaluation tools for assessing student outcomes. This project will continue to provide support to teachers conducting performance assessment in regular classrooms and disseminate our findings. For additional information about this project please e-mail, Joel@ed.pdx.edu.

The project would like to thank the following schools for participating: Elementary Schools: Bohemia, South Lane SD; Brookwood, Hillsboro SD; Buckingham, Bend SD; Dickey Prairie/Rural Dell & Molalla Primary; Molalla SD; Harvey Clark, Forest Grove SD; Lynch View, Centennial SD; Raleigh Park, Beaverton SD; Robert Frost, Silverton SD; Tobias, Reedville SD; Yaquina View, Lincoln Co. SD. High Schools: Forest Grove, Forest Grove SD; Hood River Valley, Hood River SD; Ontario, Ontario SD; Reynolds, Reynolds SD; Sherwood, Sherwood SD; Tualatin, Tigard SD; and Wilson, PPS.

Introduction

Need/Importance

Professionals and parents, throughout the United States and in other western countries, are advocating changes in models of educational service delivery to students with needs for special education and related services (i.e. students with IEPs) (Stainback & Stainback, 1989; Stainback, Stainback, & Bunch, 1989; Flynn and Kowalczyk-McPhee, 1989; Strully & Strully, 1989). Discussion of educational reform among special educators, was stimulated a decade ago by the Regular Education Initiative, (REI), (Will, 1986). Those who support the REI have sought to combine effective instructional practices for general and special education into one educational system to serve all students (Maheady & Algozzine, 1991). These reformers point out that variables identified in the study of effective schools are important for all students, with or without IEPs (Knoll, & Meyer, 1987). These professionals and parents advocate changes that involve a significant emphasis upon including students with IEPs in their local, neighborhood school and in age-appropriate, regular classes, while providing special education and related service support.

Simultaneously, general education reformers in the United States have pointed to major problems in our nation's schools, such as low achievement levels and high drop-out rates, and continue to call for a variety of reforms. Some reformers call for increasing curriculum difficulty and higher standards (Adler, 1982; National Commission on Excellence in Education, 1983; Carnegie Forum on Education and the Economy, 1986), others criticize the complex system of specialists in the schools (Sizer, 1984), some call for improved teaching conditions and improved teacher preparation (Boyer, 1983; Carnegie Forum on Education and the Economy, 1986; The Holmes Group, Inc, 1986), and still others express concern for the competitive nature of schooling and the lack of opportunities for students to cooperate (Goodlad, 1984). These proposals for general education reform, varied as they are, share a lack of attention to implications for students with IEPs. The various reform proposals offer on one hand, opportunities for further exclusion of students with IEPs, by calling for increased rigor in testing, promotion, and graduation requirements (Adler, 1982; National Commission on Excellence in Education, 1983). On the other hand, they call for opportunities for greater inclusion, by asserting that every child can learn, and there is a need for greater equity, as well as excellence (The Holmes Group, Inc., 1986; Carnegie Forum on Education and the Economy, 1986; Goodlad, 1984).

The State of Oregon currently faces initiatives for educational reform from both special and general education. The Oregon Administrator's Manual for Special Education Services (ODE, 1991) and the Oregon Comprehensive Plan for Supported Education (ODE, 1990), emphasize increased involvement of students with IEPs in local schools and regular classes, with special education support. The ODE Plan for Supported Education seeks to operationalize a new service system in which all students can learn and belong in the regular classroom. The focus of the Plan is to improve the quality of education for all students, by changing the delivery of services from separate, segregated environments to integrated, regular classroom environments, and to include support to underachieving students and students with IEPs, in the regular classroom. The

emphasis of the Plan is on development of inclusive schools, throughout Oregon, and on provision of ongoing assistance and support to schools within the change process.

Concurrently, the Oregon State Legislature passed legislation that calls for major changes in general education (66th Oregon Legislative Assembly, HB 3565, 1991). The legislation calls for: a) increases in early childhood education, ungraded primary education, and statewide educational performance standards, b) establishment of a Certificate of Initial Mastery to be obtained by 16 years of age and development of "alternative" learning programs for students and adults who do not achieve the Certificate of Initial Mastery, c) establishment of a comprehensive vocational and technical programs for non-college-bound students, d) the establishment of a State-wide Portfolio Assessment System, and e) participation by business and labor in the development and delivery of education, training programs, and standards for vocational and technical certificates and associate degrees. This legislation and its subsequent update (68th Oregon Legislative Assembly, HB 3791, 1995) do not address the provision of special education within the reformed system or the impact of new requirements on students with IEPs.

The importance of this study was its ability to evaluate direct student outcomes for students with IEPs, who are primarily placed in regular education settings. The study collected direct outcome measures on students with disabilities, who participated in the state's supported education initiative. Thus, the study was able to build upon the previous evaluation study, which collected data to document the type of support provided to students in inclusive education settings and evaluate student progress using **multiple respondent perception data**. **While this previous evaluation study collected perceptions of student progress from parents and professionals, the design of the previous study did not allow for the collection and analysis of direct student outcome data**. The extension of the previous evaluation design to include direct student outcome measures, enables the Oregon Department of Education (ODE) to assess the effectiveness of reform policies and practices on special education students.

The purpose of this current study was to provide descriptive information about the effects of Supported Education on students with and without IEPs. Specifically, regular classroom teachers and their supporting special education staff, volunteered to teach and score performance tasks in their supported education classes. Thus, the project could describe direct classroom outcomes for all students in a supported education environment.

Eleven elementary schools and seven high schools from seventeen school districts participated in this two year study. A total of 114 regular and special education teachers were involved. The study design called for four 10th grade regular classroom teachers to participate at each high school and two 3rd grade and two 5th grade classroom teachers at each elementary school. These grade levels correspond to Oregon CIM benchmark levels. Each participating school designated one person to serve as a data coordinator to assist project staff to collect necessary school information.

Four sources of data were collected from each participating school. The sources included: a) classroom performance-based assessment data, b) standardized assessments currently administered by schools, c) school records of student performance *(e.g., grades, attendance, gender, age)*, and d) school surveys of participating teachers *(i.e., perceptions of supported education and evaluation of performance tasks)*. The study collected portfolios with this information for 275 students with IEPs and 296 randomly selected students without IEPs.

Questions Addressed by the Study

The three evaluation questions for this study are listed below:

Q-1: What are the student characteristics and performance assessment outcomes of students with and without IEPs in Oregon schools implementing supported education?[1]

Q-2: What supported education implementation factors and teacher-perceived student outcomes are related to direct measures of student performance outcomes?

Q-3. What is the viability of using a performance assessment data collection system for the on-going evaluation of supported education and to assist in the development and monitoring of student IEP goals and objectives?

Limitations Imposed Upon the Scope of the Study

The primary limitation imposed on the the scope of this evaluation study was the limited resources that were available to implement the data collection system at each school to provide the necessary information. This limitation required that the data collection system be designed to be highly efficient in defining and obtaining the different types of data. In addition, one of the teachers at each school was appointed to serve as a data coordinator in order to minimize problems. Specific limitations addressed by the data collection system and the use of data

[1]The wording for this evaluation question has been changed slightly from the original question. School and classroom characteristics are described in the Methods section and analyzed for relationships to student outcomes in the Results section under evaluation question 2.

coordinators are listed below for each of the categories of school information the project collected:

Portfolio Assessment:

> Teachers have limited time and do not need to duplicate their work load with two portfolio assessment systems. It was decided early on in the project that the portfolio assessment system needed to be consistent with the new Oregon Portfolio Assessment System being put into place by the Oregon Department of Education. We were able to adapt the new Oregon Portfolio Assessment system.

Student Assessments and School Records:

> Teachers have limited time and do not need to duplicate their work load by conducting additional assessments. It was decided early on in the project that the student assessments and school records collected needed to be part of the existing information already collected at the local educations agencies (LEAs).

PROCEDURES

This section will explain the study's procedures within the following areas: 1) sample, 2) design, 3) instrumentation, 4) pilot testing/validation, 5) data collection, 6) data reduction, 7) data analysis, and 8) limitations.

Sample

A three-stage sampling procedure was used to select participating schools, teachers and students in this project. First, eleven elementary schools and seven high schools from seventeen school districts were selected to provide a representative cross-section of school districts in the state. Schools were selected only if they were implementing supported education in at least some classrooms. Second, approximately four regular education classroom teachers were identified at each school to implement a performance task in one or more of their classrooms. Finally, all students with IEPs in the participating classrooms (up to a maximum of five students) and an equal number of randomly selected students without IEPs were included in data collection.

Description of Participating Schools

Table 3 shows a number of school demographics, staffing information, and the average amount of time staff spent in the regular classroom. This data is presented for elementary and high schools separately and is summarized in the following sections. Appendix A lists the names and school districts of all participating schools.

Elementary School Sites: Eleven elementary schools participated in the project and are located across rural, suburban, and urban communities. The average student enrollment of the eleven schools was 474 students, ranging from 235 to 650 students. The average number of students with IEPs attending each school was 55, ranging from 27 to 72 students. The schools had an average of 18.6 full time regular education teachers, with a range of 10.5 to 26 teachers, and an average of 1.6 special education teachers, with a range of .7 to 3.0. The number of special education instructional assistants ranged from 2 to 4.5, with an average of 3.3 special education instructional assistants per school.

High School Sites: Seven high schools participated in the study and are located in rural, suburban, and urban communities. The average student enrollment of the seven schools was 1017 students, ranging from 517 to 1435 students. The average number of students with IEPs attending each school was 86, ranging from 38 to 168 students. The schools had an average of 48.8 full time regular education teachers, with a range of 29 to 62.5 teachers, and an average of 3.2 special education teachers, with a range of 2 to 5. The number of special education instructional assistants ranged from 4 to 16, with an average of 8 special education instructional assistants per school.

Table 3: School Demographics and Staffing Levels

School Demographics	Elementary		High School	
	Average	Range	Average	Range
School Size	474	235-650	1017	517-1435
Number of Students with IEPs per School	55	27-72	86	38-168
Students with Free/Reduced Lunch	132	62-218	210	0-393
Staffing				
FTE of Regular Education Teachers	18.6	10.5-26	48.8	29-62.5
FTE of Special Education Teachers	1.6	.7-3.0	3.2	2-5
FTE of Related Service Staff	2.1	0-6	2.2	.5-4.0
FTE of Regular Education Inst. Assts.	4.1	0-16	2.6	0-10
FTE of Special Education Inst. Assts.	3.3	2-4.5	8.	4-16

This study collected further data from each participating school about their levels of classroom support and teachers' professional experience. Table 4 shows this data separately for elementary and high schools.

Elementary School Sites: The eleven participating elementary schools reported an average of 75.9 percent of their classrooms have at least some instructional assistant support. In addition, an average of 21.2 hours of special education teachers time is spent in regular education classrooms.

High School Sites: The seven participating high schools reported an average of 54.5 percent of their classrooms have at least some instructional assistant support. In addition, they stated that an average of less than one hour per week of special education teacher time is spent in regular education classrooms. This is the amount of time spent specifically in the classrooms participating in this project. The high schools primarily provided student support through study halls and resource room periods.

Table 4: Classroom Support and Professional Experience of Participating Teachers

Amount of Staff Support	**Elementary**	**High School**
% Classrooms with some Instructional Assistant Support	75.9%	54.5%
Total Amount of Time Special Education Teachers in each Regular Classroom involved in this study *(hours/week)*	21.2	< 1.0 *
Amount of Professional Experience	**Elementary**	**High School**
Holds Special Education License - Regular Education Teachers	24.3%	13.0%
Average # Credit Hours of Course Work in Special Education	Mean # Hours	Mean # Hours
-Regular Education Teachers	5.3 54.0	1.5 79.7
-Special Education Teachers		
Average Years of Teaching Experience	Mean # Years	Mean # Years
	Spec. Ed Reg. Ed	Spec. Ed Reg. Ed
-Regular Education Teachers	.7 11.7	.5 3.5
-Special Education Teachers	13.9 7.8	11.0 1.2

* High school support is provided primarily in study halls and resource room periods.

Description of Participating Teachers

Initially, four classroom teachers and their supporting special educator were sought for participation at each school. The study targeted 10th grade regular classroom teachers at high schools and two 3rd grade and two 5th grade classroom teachers at elementary schools. These grade levels correspond to three of the four benchmark levels of the Oregon Certificate of Initial Mastery (CIM).

A total of 103 regular and special education teachers were involved in the project. As can be seen in Table 5, 65 regular education classroom teachers participated: 37 at the elementary level and 28 in the high schools. They received the support of 21 special educators in elementary schools and 17 special educators in high schools.

Table 5: Number of Participating Teachers by Job Role and Grade level.

JOB ROLE	GRADE LEVEL		TOTALS
	ELEMENTARY	HIGH SCHOOL	
Regular Education Teacher	37	28	65
Supported Education Teacher	21	17	38

Description of Participating Students

All students with IEPs in each selected class and an equivalent number of students without IEPs were included in the data collection system. Thus, the final number of students in the sample included 275 students with IEPs and 296 randomly selected students without IEPs.

The data system tracked four primary groups of students: a) students with IEPs who had major academic support needs, b) students with IEPs who had minor academic support needs, c) students with IEPs who had behavioral support needs only, and d) students without IEPs.

However, as can be seen in Table 6, only a small number of students in the classrooms had behavioral support only as a primary need. At the high school level, 91 of the 125 students with IEPs require minor academic adaptation needs, 29 require major adaptations, and only five require behavioral support. The number of elementary students with minor and major needs was much closer at 85 and 61, but again, only a small number (4) of students required behavioral support.

Table 6 :Number of Participating Students by School Level and Primary Support Need

Primary Support Need	Elementary School		High school	
	Number	Percent	Number	Percent
Minor Adaptations	85	28.2	91	33.8
Major Adaptations	61	20.3	29	10.8
Behavioral Support Only	4	1.3	5	1.9
All Students with IEPs	150	49.8	125	46.5
None (Non-IEP)	151	50.2	144	53.5

Table 7a shows that the largest disability category for students at both elementary and high school is learning disabled. Eighty nine of the 123 high school students with IEPs were classified learning disabled, while 77 of 143 elementary students with IEPs were classified learning disabled. The sample included many more students with speech or language impairments at the elementary level than at the high school level. Forty four of the 126 elementary students with IEPs were classified as having a speech or language impairment, while only 10 of 123 high school students with IEPs were so classified. Approximately 20% of the students with IEPs were categorized with a severe disability condition. This is a typical distribution for these low incidence disabilities, such as mental retardation, speech/ language impairment, autism, severely emotionally disability, vision impairment, and other health impairments. Table 7b shows that participating student at both the elementary and high school levels are closely divided between students with and without IEPs. This is to be expected since the research design called for selecting approximately equal numbers of both student groups from each classroom.

Table 7a: Number of Participating Students by School Level and Disabilities

Disability Category	Elementary School		High School	
	Number	Percent of IEP	Number	Percent of IEP
Learning Disabled	77	53.8	89	72.4
Mental Retardation	5	3.5	9	7.3
Speech/Language Impaired	44	30.8	10	8.2
Autism	4	2.8	1	0.1
Severely Emotionally Disabled	3	2.1	1	0.1
Vision Impaired	3	2.1	1	0.1
Other Health Impaired	7	4.9	12	9.8

Table 7b: Number of Participating Students by School Level and IEP Status

	Elementary School		High School	
	Number	Percent	Number	Percent
Students with IEPs	143	47.7	123	45.7
Students without IEPs	157	52.3	146	54.3

Tables 8 and 9 show the number of participating students by grade level and by sex. Over 80 percent of the high school students were in either the 9th or 10th grade since these were the target grades when selecting classrooms. Students in the 11th and 12th grades were primarily students with IEPs enrolled in 10th grade classes. Elementary school students were more evenly split between 3rd, 4th, and 5th grade levels with a small number of 6th grade students. Student participation was equally divided between boys and girls at the elementary level, but 60 percent of the high school students were boys.

Table 8: Number and Percentage of Students by Grade Level for High School and Elementary School

Elementary School

Grade	Participating Students	
	Number	Percent
3	63	20.9
4	131	43.5
5	97	32.2
6	10	3.4

High School

Grade	Participating Students	
	Number	Percent
9	91	33.8
10	128	47.6
11	27	10.0
12	23	8.6

Table 9: Number of Students by School Level and Sex

	Elementary School		High School	
	Number	Percent	Number	Percent
Male	158	52.5	158	60.5
Female	143	47.5	104	39.5

The Design

The research design for this study is both descriptive and comparative. Student direct outcome data will be described for elementary and high school students with and without IEPs. These outcomes will then be examined for differences based upon student need levels for curriculum adaptations (minor, major, behavior, and non-IEP); this is the primary independent variable.

Chart 1 shows the relationship between the primary independent variable, the primary dependent variables, and the important implementation factors. The dependent variables are performance assessment scores which measure classroom outcomes in different content areas. The implementation factors are variables that may impact upon the success of performance assessment outcomes. They are: a) student characteristics, such as grade level, gender, attendance, grades, and previous standardized achievement levels, b) teacher training levels, teacher attitudes toward supported education and performance assessment, and teacher experience, and c) school demographic factors, such as number of students with IEPs per classroom, and levels of special education support in classrooms.

Chart 1: Research Design for Study of Performance Tasks in Supported Education Classrooms

PRIMARY INDEPENDENT VARIABLE				
IEP/Non-IEP	Students with IEPs			Students without IEPs
Level of Academic Support Needed	Minor Adaptation Needs	Major Adaptation Needs	Behavior Support Only	No Adaptation Needs
PRIMARY DEPENDENT VARIABLES				
Performance Assessment Scores	X	X	X	X
SUPPORTED EDUCATION IMPLEMENTATION FACTORS				
School & Classroom Support Characteristics	X			X
Amount and type of Teacher Training	X			X
Teacher Perceptions of General Capabilities of Students	X			X
Standardized Assessments of General Capabilities of Students	X	X	X	X
Student Characteristics & School Records	X	X	X	X

X = data was collected in this area for this population of students

Instrumentation

A number of instruments were used to measure: a) student classroom performance during this study, b) general student achievement and behavior levels, and c) perceptions of participating teachers about supported education and this study. Student classroom performance levels were assessed using scoring guides developed by teachers from the state under the sponsorship of the Oregon Department of Education. These scoring guides are being developed for each content area defined in the Oregon Education Reform Act. Teachers were trained at the beginning of the project on a common set of scoring guides. They rated students using the one to six rating scale on each dimension of each content area. Specific content area scoring guides used for this study were: (a) science, (b) social science, (c) write, and (d) speak. Additionally, teachers were asked to rate students' collaboration and self-directed learning during the study. See Appendix B for a copy of the scoring guides used in this project.

A common set of instruments was defined by the project to assess student achievement and behavioral levels of individual students at each participating school. These instruments were identified during the 1993/94 school year through surveys of administrators at the schools likely to participate in this current study. The instruments identified as being used by most, if not all, schools were: (a) Oregon State-wide Achievement Assessments, (b) Vineland Adaptive Behavior Scale, (c) Connors Teacher Rating Scale, (d) Achenbach Rating Scale, and (e) Woodcock Johnson Achievement Battery.

The project developed two additional surveys to obtain information from participating teachers. The first survey asked for opinions about supported education practices, level of training on supported education, and levels of support at the teacher's school for supported education. This survey was completed by teachers both before and after participating in the project. Teachers completed a second survey at the end of the project to obtain their opinions on the success of their performance task and their satisfaction with participation in this study. The surveys were completed by all participating regular education and special education teachers. This data provided a foundation of information on levels of implementation of supported education to complete the statewide descriptive study. In addition, this survey provided data to evaluate the impact of supported education implementation factors upon student performance outcomes.

Pilot Testing/Validation

The data collection system was pilot tested during the 1994/95 school year with two schools. One high school and one elementary school implemented the entire system and helped to identify areas that could be streamlined and made more efficient. Specifically, feedback on how best to obtain school records and on the system's data collection forms led to direct modifications of the system for the 1995/96 school year. These changes were reflected in both the *Teacher's Manual* and *Data Coordinator's Manual* developed by project staff for the second year.

Data Collection

The four stages of the data collection process for the 16 schools implementing the project during 1995/96 is shown in Chart 2. This process was worked out during the previous year with one elementary school and one high school. The four stages of the process were: (a) initial project setup and participant training, (b) performance task preparation and student orientation, (c) performance task implementation, and (d) scoring of student work and final data collection.

A data coordinator was named at each participating school to allow the teacher teams to focus solely upon developing, implementing, and scoring their performance task with their students. Specifically, data coordinators were responsible for the following: (a) obtaining parental permission for students in classes, (b) randomly selecting up to five students with IEPs and an equal number of student without IEPs from each class, (c) collecting specific school records and assessment data on the selected students, and (d) coordinating communication and support between participating teachers and project staff. The timing of these activities across the four stages of the project are shown in Chart 2.

Four types of data were collected for all selected students at each school. That data included: a) performance task scores as assigned by teachers, (b) school records *(e.g. grades, attendance, disciplinary actions)*, c) student assessment scores on standardized tests and rating scales *(currently existing scores available in the students files)*, and d) demographic information *(e.g., gender, date of birth)*. Examples of the report forms used by data coordinators to accumulate school records, assessment scores and demographic data are shown in Appendix C.

In addition to data about selected students, two brief school surveys were administered to all participating teachers. One survey was administered at the beginning and the end of the project to determine opinions and beliefs about supported education. A second survey was completed at the end of the project to evaluate the success of the performance tasks and their perceived impact upon student outcomes.

Chart 2: Supported Education Project 1995/96 Process

STAGE 1	STAGE 2	STAGE 3	STAGE 4
PROJECT TRAINING & SETUP	**LESSON PREPARATION & STUDENT ORIENTATION**	**CLASSROOM IMPLEMENTATION**	**STUDENT SCORING & DATA COLLECTION**
SEPT - OCT 1995	NOV - DEC 1995	JAN - FEB 1996	MAR - APR 1996
1. Data Coordinator identifies participating teachers and classes. 2. Data Coordinator obtains parent permission for student participation. 3. Teachers & Data Coordinator attend project workshop. *(Define and develop performance task for Winter quarter.)*	1. Teacher teams introduce scoring guides to students and score regularly assigned work. 2. Teacher teams finalize performance task and obtain necessary materials. 3. Data Coordinators select students with and without IEPs students for project data collection	1. Teacher teams implement performance task. 2. Teachers and students maintain student work portfolios. 3. Data Coordinator collects student demographic data.	1. Teacher teams score student work and make copies of student work examples. 2. Data Coordinator finishes collecting student school records & assessment data. 3. Project staff collect student scores and examples of student work.
ONE DAY PROJECT WORKSHOP IN PORTLAND. ***(SUBSTITUTE TEACHERS PROVIDED BY PROJECT.)***	**ONE OR TWO BRIEF (~ 1 HOUR) ON-SITE TEAM MEETINGS FOR ASSISTANCE FROM PROJECT STAFF.**		**ONE IN-SCHOOL TEAM MEETING FOR SCORING STUDENT WORK.** ***(SUBSTITUTE TEACHERS PROVIDED BY PROJECT.)***

Teacher Activities

This section describes the teacher activities for the project. After receiving training on performance assessment tasks, teachers used November and December to finish developing a performance task defined at the October workshop and to introduce scoring guides to their students. They used the scoring and rating guides on classroom work assigned independently of this project and shared that information with their students. Teachers implemented their performance task to fit into their regular curriculum sometime during January and February.

A strong performance task includes a number of learning activities and provides students multiple opportunities to demonstrate newly acquired knowledge and skills. For this study, most performance tasks required each student to (a) write at least one paper, (b) make one oral presentation, (c) spend some time working in a group, and (d) direct or manage their own learning.

Teachers indicated a number of instructional modifications and adaptations they used for students with IEPs at the elementary school level. They include: verbal prompts and cues, adults reading forms aloud, and 1:1 assistance on organization and research. Modifications/adaptations at the high school level included: prodding, reduced amount of work, explanation of concepts, and assistance with organization, proofing, and research. Appendix __ provides a more detailed list of adaptations and modifications used by teachers at both the elementary and high school levels.

The performance tasks were developed for either Social Studies or Science classes. All students in each classroom participated in all activities of the performance task, but only approximately ten students (3-5 students with IEPs and an equal number of students without IEPs) were selected to have their work scored. The performance areas that were taught and scored for this study are shown in Table 10. Teachers used three formal scoring guides (a) either Science or Deliberate on Public Issues, (b) Communicate-Write, and (c) Communicate-Speak. They also used less formal rating scales of students on Collaboration and Self Directed Learning.
All scoring guides were developed during the previous two year period by teams of teachers sponsored by the Oregon Department of Education.

Table 10 - Performance Task Content Areas

Teacher teams selected to implement a performance task from either: or	
Science	Social Studies
*Based upon their choice, teachers **scored** students in the following areas:*	
Science	Deliberate on Public Issues
Write	Write
Speak	Speak
*Teachers **rated** students in the following areas:*	
Collaborate	Collaborate
Self-Directed Learning	Self-Directed Learning

Table 11 lists the names of the performance tasks implemented at a few participating schools. Some tasks were implemented in more than one classroom, as teacher's collaborated within and between grade levels at a given school. The performance tasks provided a broad representation of topics from social studies and science classes. They included such topics as selecting which foreign languages should be offered, creating inventions with magnetism, and a study of the geology of the Columbia Gorge.

Table 11 - Sample Listing of Schools and Their Performance Tasks

Elementary School	Performance Tasks Implemented
Buckingham *(Bend)*	*Which foreign language should be taught? *Should toy guns be made and sold for profit? *Science research project *Earth and sea investigation
Robert Frost *(Silverton)*	*Inventions with magnetism *Inventions - simple machines *Resourcefully yours
Raleigh Park *(Beaverton)*	*Should dams be built on the Columbia River? *Water, water everywhere
High School	**Performance Tasks Implemented**
Forest Grove	*Build a dream house *Family history interview *Create a cell model and diffusion/osmosis lab
Ontario	*Science experiment reviewed *The hero's journey *Reports on South America *Animal project
Reynolds *(Troutdale)*	*DNA and Genetics study *Columbia Gorge geology project *Community service project *History Studies: WWI, WWII, Imperialism

Data Reduction

A large amount of information was collected using the data collection system developed for this project. A system of data entry, verification, and reduction was used to ensure accuracy during the data analysis stage. All data entry was conducted by a project research assistant and accuracy was verified by a number of data checks. Data reduction was accomplished by creating many different tables relevant to the project's specific evaluation questions. Various units of analysis were also used to answer different questions.

Data Analysis

The results of the full evaluation study are intended to lead to answering each of the evaluation

questions. The following analysis plan describes the necessary evaluation activities to answer those questions.

Evaluation Question #1. **What are the student characteristics and performance assessment outcomes of students with and without IEPs in Oregon schools implementing supported education?**

This question was analyzed separately for participating elementary schools and participating high schools. Frequency analyses and descriptive statistics were computed for all important variables representing classroom characteristics, student characteristics, and student outcomes. Cross-tabulation analyses were examined for key subsets of those variables by (a) level of student adaptation needs, and (b) sex. In addition, data tables were created to compare the average performance scores for student with IEPs students to students without IEPs. This was accomplished by constructing score ratios for the IEP student groups which reflected what percentage their scores were of the average non-IEP student scores. Additionally, descriptive statistics and cross-tabulations were run to better understand teacher perceptions of supported education in their classrooms and how well it served both students with and without IEPs.

Evaluation Question #2. **What supported education implementation factors and teacher-perceived student outcomes are related to direct measures of student performance outcomes?**

During the data analysis stage of the statewide descriptive study, a number of variables and scales were standardized to measure supported education implementation and student outcomes for use in this in-depth analysis. All variables and created scales were examined for adequate psychometric properties such as variability and reliability. A few did not show adequate reliability and were not used in further analyses due to concerns of interpretation of findings.

This question was answered in two stages. The first stage compared the assessments of direct student outcomes with the professional staff perceptions of student outcomes. The impact of supported education was further validated by showing similar findings from these two types of measures. However, potentially useful findings may occur where there are differences between perceptions and direct measures of student outcomes.

The second stage of answering this evaluation question was to conduct correlational studies between a number of key "Implementation Factors" of supported education, direct measures of student outcomes, and perceptions of student outcomes. Initially, correlation statistics were examined between a number of variables of interest to search for informative patterns of association. More explanatory analyses were then conducted to determine if a series of implementation variables and school or classroom variables could explain differences on direct outcome measures or perceived outcomes of teachers and parents.

Evaluation Question #3 **What is the viability of using a performance assessment data collection system for the on-going evaluation of supported education and to assist in the development and monitoring of student IEP goals and objectives?**

It is the hope and intent of project staff that the data collection system used for this full evaluation of supported education implementation will be useful to local education agencies (LEAs) and state education agencies (SEAs) in the future for similar evaluation activities. Close attention has been given to developing a system that places as little burden upon teachers and administrators as possible in the collection of important information. A pilot-test during Year 1 of this project was used to further refine procedures to ensure smooth and effective collection of data that is relevant and applicable to answering key evaluation questions. Findings from the pilot-test with two schools were used to modify the system for the second year implementation with 15 schools.

Two manuals were written for the pilot test and then modified for the second year. The *Data Coordinators Manual* provided full details of the data collection procedures for the year. Forms were provided for data coordinators to use to write down school records and standardized assessment information for students. A *Teachers Manual* likewise explained the project's objectives and detailed activities for teachers. Sample scoring guides and potential curriculum adaptations were provided in appendices.

Surveys and interviews were used to obtain information during both years of implementation about the viability of schools using the system for future evaluations. In particular, interviews with data coordinators at each school provided useful feedback potential improvements to the system of data collection. In addition, all participating teachers completed a survey at the end of the project year. The *CIM Task Field Test Evaluation Form* provided useful information about the overall success of the implementation and scoring of performance assessment tasks.

Finally, a reliability study was conducted to determine how consistent student work would be scored from performance assessment tasks. A number of graduate students independently scored and then computed inter-rater reliabilities for randomly selected written reports and videotaped oral presentations. This information was used to determine how practical and useful performance assessment might be in supported education classrooms.

Limitations

A number of potential limitations were considered during the development of the project design. One limitation was the number of students that each teacher team would be able to score using the scoring guides. A maximum of ten students were scored from each classroom while the typical classroom size was from 20 to 30 students. All students with IEPs were chosen to be scored along with an equal number of students without IEPs chosen randomly.

Another limitation of the project was the length of time that each classroom teacher had to

implement performance tasks. Most tasks took approximately two to three weeks to implement. Clearly students perform better on these tasks after having more experience with other similar tasks. A follow-up study of students exposed to this form of instruction in supported education classrooms would be useful to determine if students do make more learning gains after they become familiar with performance tasks and their scoring guides.

FINDINGS

Findings will be presented for each of the three evaluation questions which guided this study. These results flow from the research design presented earlier and, therefore, will (a) describe characteristics of participating schools, teachers, and students, (b) describe student outcomes on performance tasks, (c) present any relationships found to exist between implementation/background characteristics and direct measures of student outcomes, and (d) indicate the viability of the data collection process for future evaluations.

Evaluation Question 1: What are the student characteristics and student performance outcomes of students with and without IEPs in Oregon schools implementing supported education?

As expected, students without IEPs scored significantly higher (prob. < .05) than students with IEPs on both classroom performance tasks and on standardized assessments. Table 12 shows that performance scores for elementary school students with minor adaption needs range from a low of 2.55 in Science and Math to a high of 3.12 in Social Studies. Students with major adaptation needs also scored highest in Social Studies, but at only 2.53. These students scored lowest in self directed learning (2.12). Elementary students' without IEPs scores averaged at or near 4.0. Social Studies was once again near the top among content areas with a 4.00 average score, which was only exceeded by the 4.03 for Collaborate. Science, while very close to the other outcome area scores, was again lowest at 3.79.

Table 12: Mean Performance Assessment Scores by Student Support Needs Level *(Elementary School)*

	Student Needs Level		
Performance Area	IEP-Minor (n=83)	IEP - Major (n=58)	Non-IEP (n=144)
Science	2.55	2.35	3.79
Social Studies	3.12	2.53	4.00
Write	2.84	2.49	3.81
Speak	2.94	2.57	3.91
Self-Directed Learning	2.73	2.18	3.91
Collaborate	2.80	2.27	4.03

(Possible range for scores is from 1 to 6 with higher scores denoting better performance)

Table 13 repeats the performance assessment information of Table 12, but for high school students. Again, students who have IEPs with major support needs scored lowest in all areas, students with minor support needs scored in the middle, and students without IEPs were always the highest scoring group. Scores in all content areas are from .70 to .90 higher for students without IEPs than for students with minor support needs. Students with major needs lag further behind by as little as another .24 in Speak to as much as another .71 in Science. Interestingly, the students without IEPs averaged higher in Science at 4.01 than in Social Studies at 3.81. This was contrary to the trend for all other groups at both elementary and high school levels.

Table 13: Mean Performance Assessment Scores by Student Support Needs Level *(High School)*

	Student Needs Level		
Scoring Area	IEP-Minor (n= 78)	IEP - Major (n=27)	Non-IEP (n=122)
Science	3.09	2.34	4.01
Social Studies	3.4	3.14	3.81
Write	3.16	2.85	3.9
Speak	3.35	3.11	3.84
Self-Directed Learning	3.02	2.63	3.91
Collaborate	3.53	3.15	4.24

Table 14 presents the percentile rank scores on standardized achievement tests administered to elementary school students in the three support needs levels. These standardized assessment scores were collected and compared for content areas of reading, writing and math. As would be expected, the student scores for the two groups of students with IEPs lags far behind the students without IEPs. Academic functioning skills are markedly different between the three groups. The student without IEPs in this sample averaged right at the 60th percentile across the three content areas. Students with minor support needs averaged between the 25th and 30th percentile. Students with major support needs show their higher needs through very low percentile rankings (15.9 to 17.7) in all three categories.

Table 14: Percentile Scores on Standardized Achievement Assessments by Needs Level *(Elementary School)*

	Student Needs Level					
Scoring Area	IEP-Minor		IEP - Major		Non-IEP	
	Mean	n	Mean	n	Mean	n
Reading	24.5	62	16.5	41	61.1	108
Writing	26.5	15	15.9	17	64	32
Math	30.1	59	17.7	40	59.1	106

Table 15 repeats the standardized achievement assessment information in Table 14 for the high school students in the study. Once again, the percentile rank scores show students without IEPs to be slightly above the median score in all three areas (51.4 to 57.5) while the students with IEPs languish at a much lower comparative skill level. The students with major support needs scored at approximately the 10th percentile in all three areas. The major surprise in this table is that students with minor curricular support needs scored extremely low in writing skills. At the 11.9 percentile, in this sample, they scored even lower than the group of students with major needs.

Table 15: Percentile Scores on Standardized Achievement Assessments by Needs Level *(High School)*

	Student Needs Level					
Scoring Area	IEP-Minor		IEP - Major		Non-IEP	
	Mean	n	Mean	n	Mean	n
Reading	23.5	68	10.9	7	56	118
Writing	11.9	26	12.8	4	51.4	35
Math	23.5	68	9.9	7	57.5	118

Table 16 shows comparisons of average classroom performance scores for the elementary school sample to the high school sample. Results are shown within each content area for the four student support needs levels. Students without IEPs showed no statistically significant differences from elementary to high school in any of the content area scores. In several performance content areas, students with IEPs showed significant differences from elementary school to high school. One example is the Science content area. Students with IEPs who have minor support needs scored an average of 2.55 at the elementary level, but a significantly higher 3.14 at the high school level. Students without IEPs showed a smaller improvement from 3.79 to 4.07.

Table 16: Portfolio Means by School Level for Each Student Needs Category

	Elementary		High School			
	Mean	n	Mean	n	t-value	prob
Non-IEP						
Collaborate	4.03	139	4.32	91	1.86	.064
Communicate-Speak	3.91	140	3.92	99	0.06	.956
Communicate-Write	3.82	141	3.97	97	1.03	.306
Self-Directed Learning	3.90	142	4.00	96	0.60	.550
Deliberate on Public Issues: A	4.05	63	3.90	63	-0.17	.487
Apply Science & Math	3.79	82	4.07	36	1.36	.176
Major Needs: IEP						
Collaborate	**2.24**	**50**	**3.38**	**13**	**2.59**	**.020**
Communicate-Speak	2.53	52	2.90	15	0.97	.344
Communicate-Write	2.44	53	2.43	15	-0.04	.98
Self-Directed Learning	2.13	55	2.50	15	1.11	.272
Deliberate on Public Issues	2.50	22	2.31	8	-0.42	.677
Apply Science & Math	2.38	32	2.33	6	-0.09	.929
Minor Needs: IEP						
Collaborate	**2.75**	**76**	**3.62**	**49**	**3.86**	**.000**
Communicate-Speak	**2.92**	**76**	**3.43**	**53**	**2.85**	**.005**
Communicate-Write	2.82	82	3.09	55	1.44	.152
Self-Directed Learning	2.69	79	3.08	49	1.62	.109
Deliberate on Public Issues: A	3.06	36	3.40	32	1.20	.236
Apply Science & Math	**2.55**	**43**	**3.14**	**23**	**2.05**	**.045**
Behavioral Needs: IEP						
Collaborate	3.04	5	4.00	3	N/A	N/A
Communicate-Speak	2.61	5	3.08	3	-----	-----
Communicate-Write	2.93	5	3.17	4	-----	-----
Self-Directed Learning	2.50	4	3.50	4	-----	-----
Deliberate on Public Issues	2.67	3	3.67	1	-----	-----
Apply Science & Math	2.38	2	3.50	2	-----	-----

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Performance scores compared to standardized achievement assessment scores

By examining Tables 12 through Table 15 it can be seen that the gap between students with and without IEPs on performance scores was much smaller than the gap between them on standardized achievement assessment scores. This supports the possibility that modifications and adaptations do have a positive effect for students with IEPs. Students with IEPs can rise above low skills in reading, writing, and math when provided with support and multiple opportunities to perform. Performance assessment tasks can be an effective way to allow students with IEPs to build and show academic skills. The comparative results between performance scores and standardized achievement assessment scores will be analyzed separately for elementary and high school students.

Elementary School Comparisons

Table 17 shows comparisons of classroom performance task scores for students with IEPs to scores of students without IEPs. Each score indicates how closely students with IEPs came to scoring at an equal level (100%) to their non-IEP classmates in each of the content areas. These comparative scores were computed from the data in Table 12 by dividing the average score for students with IEPs by the average score for students without IEPs. Thus, students identified as having minor academic adaptational needs received performance scores that ranged from as low as 67% *(Science)* to as high as 78% *(Social Studies)* of the average scores received by students without IEPs. The 67% for Science was computed by dividing the 2.55 science score of students with minor support needs by the 3.79 science score for students without IEPs.

Table 17: Comparison of Classroom Performance Task Scores: Students with IEPs Scores as Percentage of Non-IEP Student Scores *(Elementary School)*

	Percentage (IEP Scores Divided by Non-IEP Scores)	
Scoring Area	IEP-Minor to Non-IEP	IEP-Major to Non-IEP
Science	67*	62
Social Studies	78	64
Write	75	65
Speak	75	66
Self-Directed Learning	70	56
Collaborate	69	56

* IEP-Minor students scored 67% as high as Students without IEPs. (These scores were computed by dividing scores for students with IEPs by scores for students without IEPs from Table 12.)

Table 18 shows similar comparisons of scores for students with and without IEPs, but on standardized achievement assessment scores from Table 13 rather than classroom performance scores. Table 18 shows that students with minor needs lag much further behind their counterparts in the three areas of the standardized assessments. Their percentile rankings ranged from 40% of non-IEP scores *(Reading)* to 51% of non-IEP scores *(Math)*. This pattern also holds for students with major support needs. Table 18 shows that their standardized test scores equal only from 25 percent to 30 percent of similar scores for students without IEPs. This compares to a much higher percentage of scores for students without IEPs on the classroom performance task scores. Table 17 shows that classroom task scores for the students with major support needs ranged anywhere from 56% *(Collaborate and Self-Directed Learning)* of non-IEP student scores to a high of 66% *(Speak)*.

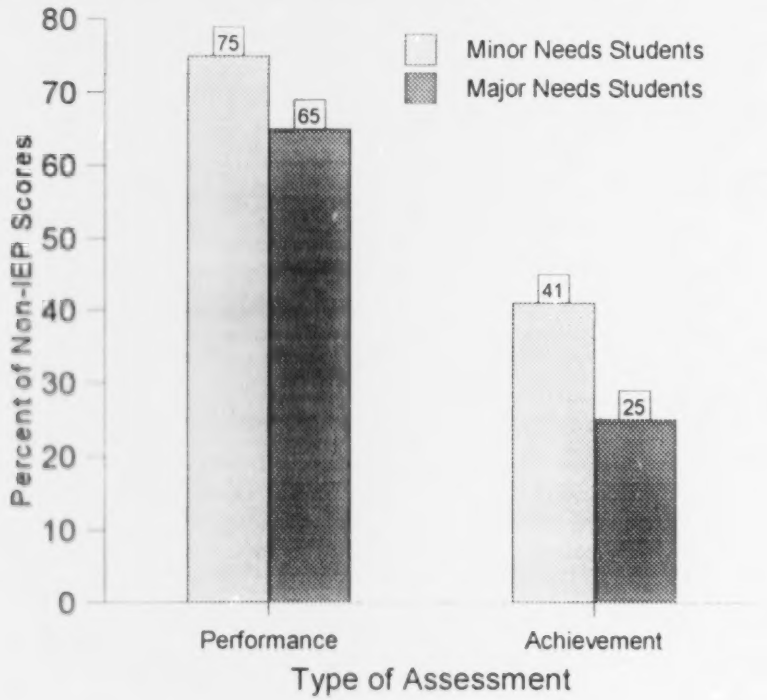
Table 18: Comparison of Standardized Achievement Assessment Scores: Students with IEPs Scores as Percentage of Non-IEP Student Scores (Elementary School)

	Percent Scores (IEP to Non-IEP)	
Scoring Area	IEP-Minor to Non-IEP	IEP-Major to Non-IEP
Reading	40*	27
Writing	41	25
Math	51	30

* IEP- Students with minor needs scored 40% as high as students without IEPs. (These scores were computed by dividing scores for students with IEPs by scores for students without IEPs from Table 14.)

The discrepancy between performance scores and standardized assessment scores for students with IEPs can be directly compared for Writing. It is the only specific content area represented in both Tables 17 and 18. Chart 2 shows these relative scores on Write for students with IEPs with minor and major academic support needs. It shows the wide discrepancy between results on classroom performances and standardized achievement assessments for both groups of students with IEPs. Students with minor needs scored 75 percent of the level of students without IEPs on Write in classroom performance tasks, but only scored 41 percent as high as the same students without IEPs students on standardized assessments. Students with major needs show the same result at lower functioning levels. That is, they scored 65 percent of the level of students without IEPs on Write in classroom tasks, but only 25 percent of the level of the students without IEPs on standardized assessments.

Chart 2: Comparison Between Performance and Achievement Scores in Writing for Students With IEPs. (Elementary School Students)



High School Comparisons

Tables 19 and 20 repeat the information from Tables 17 and 18 for high school students. Similar results were found showing that both students with minor needs and those with major needs lag behind students without IEPs in all score areas. Again they lag much less on classroom performance task scores (Table 19) than on standardized assessment scores (Table 20). Interestingly, the performance area that students with IEPs most closely approach receiving equal scores (100%) to the students without IEPs, is in Social Studies. As seen in Table 19, students with minor support needs score 89% as high and students with major needs score 82% as high on average.

Additionally, high school students with IEPs score more closely to their non-IEP counterparts on classroom performance tasks than do elementary school students with IEPs. For example, the performance scores of high school students with minor adaptive needs ranged from 77% to 89% of non-IEP levels (see Table 19) while those scores for elementary school students with minor needs (Table 17) ranged from 67% to 78%. As would be expected, Science is the content area that creates the greatest difference on performance task scores between students with and without IEPs. Self-directed learning is again a problem for students with major support needs. Their performance task scores are only 67% as high as the students without IEPs in this content area.

Table 19: Comparison of Classroom Performance Task Scores: Students with IEPs Scores as Percentage of Non-IEP Student Scores (High School)

	Percent Scores (IEP to Non-IEP)	
Scoring Area	IEP-Minor to Non-IEP	IEP-Major to Non-IEP
Science	77*	58
Social Studies	89	82
Write	81	73
Speak	87	81
Self-Directed Learning	77	67
Collaborate	83	74

* IEP-Student with minor needs scored 77% as high as students without IEPs. (These scores were computed by dividing scores for students with IEPs by scores students without IEPs from Table 13.)

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High school students on IEPs lag further behind the students without IEPs in several areas than do elementary students on IEPs. For example, high school students with minor support needs scored only 23 percent as high as students without IEPs (Table 20), compared to 41 percent for elementary school students with IEPs (Table 18). Additionally, the high school students with major academic support needs scored only at 19 and 17 percent of students without IEPs in Reading and Math respectively. Elementary students with major support needs scored at 27 and 30 percent in Reading and Math.

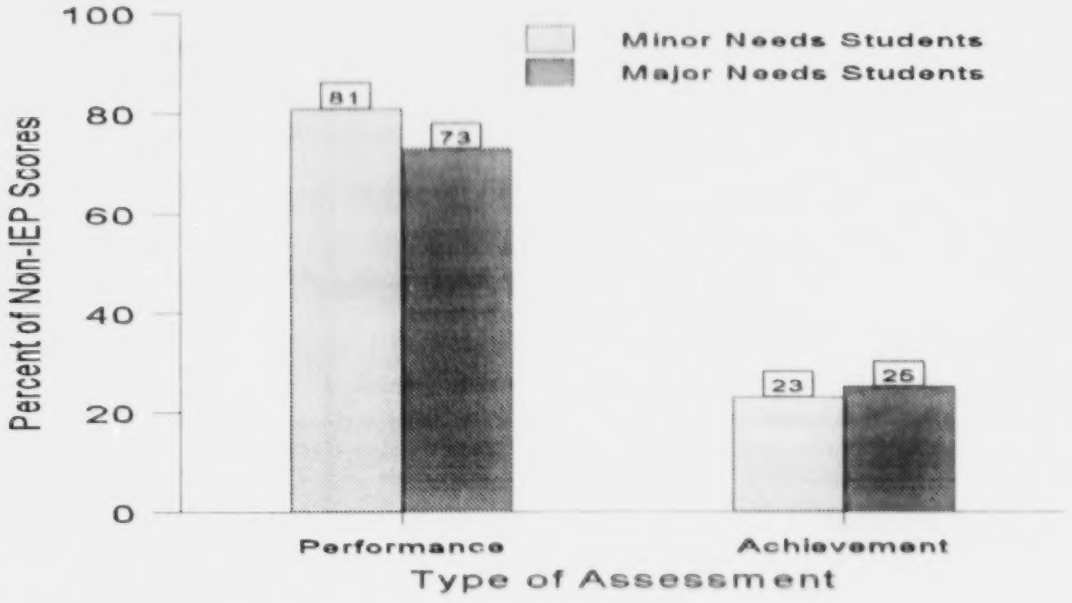
Table 20: Comparison of Standardized Achievement Assessment Scores: Students with IEPs Scores as Percentage of Non-IEP Student Scores (High School)

	Percent Scores (IEP to Non-IEP)	
Scoring Area	IEP-Minor to Non-IEP	IEP-Major to Non-IEP
Reading	42	19
Writing	23	25
Math	41	17

* Performance scores are percentile rankings. (These scores were computed by dividing scores for students with IEPs by scores for students without IEPs from Table 15.)

Chart 3 shows the relative scores on Write for high school students with minor and major academic support needs. It shows the wide discrepancy between results on classroom performances and standardized achievement assessments for both groups of students with IEPs. These results match those for elementary students from Chart 2. Students with minor needs scored 81 percent of the level of students without IEPs on Write in classroom performance tasks, but only scored 23 percent as high as the same students without IEPs on standardized assessments. Students with major needs show the same result at lower functioning levels. That is, they scored 73 percent of the level of students without IEPs on Write in classroom tasks, but only 25 percent of the level of the students without IEPs on standardized assessments.

Chart 3: Comparison Between Performance and Achievement Scores in Writing for Students With IEPs. (High School)



Evaluation Question 2: **What supported education implementation factors and teacher-perceived student outcomes are related to direct measures of student performance outcomes?**

Data collected from both elementary and high schools are currently being analyzed to determine if significant relationships exist between key implementation factors and the success levels of students on the performance task scores. Implementation factors include data collected about the amount of teacher training and levels of academic support for students with IEPs included in regular education classrooms. This information will help schools determine how best to implement supported education.

Evaluation Question 3. **What is the viability of using a performance assessment data collection system for the on-going evaluation of supported education and to assist in the development and monitoring of student IEP goals and objectives?**

On-going feedback from data coordinators at the two participating schools, during the first year of the project was used in the development of the data collection system used with eighteen schools the following year. Coordinators provided information about particular data items that were difficult to obtain in a timely fashion or in the form that had been planned. This was very useful to make the project as efficient and effective as possible. One indication of the success of the data collection system is that each data coordinator who began the project at the twenty schools, successfully completed their activities.

Participating teachers were surveyed at the end of their involvement in the project about a number of implementation and success factors. The results of that survey will be summarized for three areas: a) the process of implementing and scoring performance tasks, b) the success of performance tasks, and c) the degree of fit between activities of performance tasks and learning goals and objectives defined on individual student IEPs.

The process of implementing and scoring performance tasks

Teachers reported that the average time spent designing, implementing and scoring the performance tasks was 42 hours. Table 21 shows how 57 teachers report their time was spent between a number of different activities. On average each classroom task took 16 hours of teacher time to implement the performance task. That does not include another 5.6 hours spent planning for the task. Pre-training of students to develop necessary skills for the project also consumed an average of 7.2 hours of teacher time. Scoring of student work took over six hours despite the small number of students from each teachers classroom that were actually scored.

Table 21: Average Amount of Teacher Time Spent On Performance Tasks

Project Activity Area	Average Teacher Time Spent
Task Planning	5.6
Pre-task training/preparation	7.2
Adaptations preparation	5.2
Classroom task implementation	15.9
Scoring guide development	1.9
Student Scoring	6.2
TOTAL	42.0

Teachers were also asked if any of these activities were too time consuming. Forty five percent of the teachers indicated that student scoring was too time consuming. Teachers reported that they scored an average of 12.8 unique content area dimensions during the study. Furthermore, the teachers indicated that approximately nine dimensions were the most reasonable number of tasks they can currently score. Task planning is the only other activity with a significant percentage (14%) of teachers reporting it as being too time consuming. Thirty one percent of the 57 teachers indicated that none of the areas were too time consuming.

Table 22 shows results of how well teachers felt the different scoring guides worked for the four major student groups as defined by the level of student support needed. They rated the scoring guides on a scale from 1 to 10 where 10 meant the guide worked extremely well. In every content area the ratings were highest for students without IEPs and next highest for minor needs students. The scores for students without IEPs ranged from 7.96 to 8.73. Thus, the scoring guides were rated workable, but not with extreme ease as scores between 9 and 10 might suggest.

Major support needs students were consistently rated least appropriate for the scoring guides, below the behavioral needs students. Their scores ranged from a low of 6.09 to a high of 6.85. The Science/Social Studies scoring guides were rated least workable among the five content scoring guides for each of the four student groups. The Speak scoring guide was rated most workable for all four student groups.

Table 22: Teacher Rating of How Well Scoring Guides Worked For Student Groups

	Level of Student Support Needs			
Content Area	**Minor Needs**	**Major Needs**	**Behavioral Needs**	**Students Without IEPs**
Science or Social Studies	7.43	6.09	6.70	7.96
Collaborate	8.02	6.61	7.74	8.49
Self Directed Learning	7.48	6.34	7.11	8.40
Communicate: Write	8.12	6.68	7.05	8.71
Communicate: Speak	8.30	6.85	7.43	8.73

(Rating Scale ranges from 1=did not work at all to 10=worked extremely well)

Finally, teachers were asked to identify whether they would rather use the scoring guides developed through state department sponsored activities or traditional grades to assess student work. Thirty one or 53% of respondents indicated their preference for the scoring guides. Only 13.6 percent of respondents voiced a preference for grades alone. However, 27.1 percent indicated they preferred a combination of scoring guides and grades.

The success of performance tasks

Teachers were asked a series of questions about how they perceived the successfulness of the performance task. The first question asked was "how well did this task work in your classroom?" The average teacher rating was 7.49 on a scale of 1 to 10, where 10 equals worked extremely well. Therefore, teachers felt the tasks worked reasonably well, but not "extremely" well. When asked to rate how well the task fit with their curriculum, teachers responded more positively with a 8.33 on average.

Next, teachers were asked to rate how well their performance task worked for each of the four groups of students as defined by the level of classroom support needed. Again, using the 1 to 10 scale, teachers indicated the tasks worked very well (8.45 on a scale of 1 to 10) for students without IEPs. An average rating of 7.34 for students with minor needs, indicates the tasks worked well. However, the scores for students with major needs and those with behavioral needs were very low (5.36 and 5.50 respectively).

Instructional adaptations were rated at 6.32 and 6.47 for behavioral needs and major students. This suggests they were not as successful as would have been hoped. However, the instructional adaptations were more favorably rated for students without IEPs (7.76) and for those students with minor support needs (7.65).

Teachers identified a number of benefits their performance task had on their classroom. Benefits included: a) all students worked together on the same tasks, b) a time for reflection was provided for students and teachers, and c) parental involvement was higher in the elementary setting. In addition to these benefits, teachers identified potential problems associated with performance tasks in supported education classrooms. For example, they indicated that since many tasks take a lengthy time to implement, it may be difficult to meet IEP goals, especially for students with major needs. Teachers also indicated that while performance scores provide a lot of information about a student, they do require a considerable amount of teacher time.

Teacher opinions and data results contradict the commonly voiced concern that students without IEPs receive less support and therefore perform lower academically due to the inclusion of those students who do have IEPs. Results show that students without IEPs typically received high scores and teachers indicated these students performed as well or better than in traditional classroom activities.

Fit between activities of performance tasks and IEP goals and objectives

Finally, teachers rated how well they saw the performance tasks fitting with student IEP goals and objectives for the three subsets of students. Minor support students received by far the highest rating 7.76, while major needs and behavioral needs students were significantly lower at 6.89 and 6.85 respectively. Teachers are reporting a degree of correlation between IEP goals and the performance tasks, but not as high as might be expected if students were working

Teachers reported that the overwhelming majority of students in all four categories were able to participate in all facets of the project's activities. The only group below 90 percent was the students with major needs. Teachers reported on average that 78 percent of major needs students were able to participate in all activities.

Inter-rater reliability of scoring guide scores

A special study was conducted by four graduate students (Rust, Bolton, Grose & Stanfield, 1996) to determine how closely ratings from different judges would match on given student performances. The four students served as independent judges and used the project's scoring guides to rate performances of Write and Speak for 76 different students across grades 3,5, and 10. The Write content area includes three specific scoreable dimensions: ideas/content, organization, and conventions. The number of exact agreements between judges on the one to six scale was computed for each student performance in each of the three dimensions. The results showed a high level of agreement between the four judges across the three areas. Specifically, in ideas/content 75 percent of the student performances had either agreement between all four judges or between three of the four judges. The organization dimension had agreement between three or four judges on 80 percent of the performances and the conventions dimension had agreement between three or four judges for 89 percent of the performances.

The number of scoring agreements between judges was also computed for each student performance in the Speak content area. Speak consists of four scoreable dimensions: content, organization, language, and delivery. The results again showed a high level of agreement between judges. "Language" was the most reliable dimension with a 98 percent level of agreement. The agreement levels for the other dimensions were 80 percent in "content," 83 percent in "organization," and 88 percent in "delivery." The least reliable dimension for both Write and Speak were those related to "content." This is not surprising since the four judges are not necessarily experts in each of the content areas that the students addressed through their papers and speeches.

Additionally, this study showed acceptable levels of agreement between judges for both students with and without IEPs and across grade levels (3rd, 5th, and 10th). The comparisons with the lowest reliability were correlations between the judges and the classroom teachers. Obviously, teachers are closer to the students and other factors that can influence scoring.

Limitation of Findings

Generalization of findings from this study may be limited to schools with similar characteristics as the 20 schools from Oregon who participated in this project.

CONCLUSIONS

This section provides a brief summary of the findings of the project and discusses the implications of those findings. In addition, a series of recommendations are presented for next steps in the State of Oregon based upon those findings.

Summary

Numerous districts and education service districts are struggling with the assessment of students with special education needs in terms of progress on the Oregon Benchmarks and Content Standards. Teachers have struggled for a number of years with the evaluation of student outcomes. Many special educators' perceptions are that students with special needs will not achieve a CIM, and therefore do not need to participate in the CIM assessment process. Our initial findings in the performance assessment area are far more positive than negative. We have found that students with IEPs score proportionately higher on performance assessment tasks, than on traditional standardized assessments. We have also found that in some content areas, performance scores of high school students with IEPs, are significantly higher than elementary school students with IEPs. At the same time, students' without IEPs performance scores remain constant between elementary and high school. However, it is true that students with IEPs score lower than students without IEPs on performance tasks. As districts begin to implement assessment procedures leading to the awarding of the CIM many students, both IEP and students without IEPs may not meet the standards. This should not stop us from including all students in the assessment process.

Our research also has found that performance tasks are an effective method for increasing collaboration between special education and regular education and for providing needed feedback to students with special needs about their performance in the regular class. Special and regular educators need to learn to work together effectively and to collaborate. Performance assessment provides a clear mechanism to do this. The scoring guides can be a communication tool between regular and special education teachers and their students. The criteria established on the scoring guides allows the regular and special education teachers, as well as the student, to know what to work on, what is important, and what is required.

Working together, special educators, classroom teachers and higher educators can become familiar with the use of performance assessment and scoring guides in the regular education classroom, for the benefit of all students. The assessment of students using performance assessment in the regular classroom is an opportunity to better understand student performance levels in realistic settings and to further the development of evaluation tools for assessing student outcomes against accepted standards in key content areas.

Implications

One clear implication of these findings is that a lot of hard work remains to meet the state of Oregon's goal of educating all its young people to world standards. During challenging times of uncertain resource levels, it is imperative for the educational community to continue moving forward with positive reforms that are cost efficient, as well as effective for students. This study has verified that performance assessment tasks in fully integrated and supported education classrooms is one promising method to improve student outcomes equitably for all students. All students benefit when students with IEPs are included in regular classrooms, with proper academic support, to meet their special support needs. Students particularly benefit when they are provided rich instructional and assessment environments, which afford them various response modes. Students prosper when they are given a wide range of opportunities to write, speak, collaborate in group activities, and monitor their own learning.

Another implication of this study's results is that a strong need exists to provide more training for teachers to allow them to begin integrating performance tasks and scoring guides into their instruction as early and consistently as possible. Many students will not meet the CIM standards unless they receive more instruction with attention to specific adaptations and modifications from their early elementary school years on. Many teachers learned about performance assessment for the first time during our research studies and many more throughout the state have not received any training in the area.

One important finding from this study is that true collaboration occurs best between regular and special education teachers, when they work together on performance assessment. An important key to successful implementation of new educational reforms is to foster strong collaborative efforts between the classroom teachers and their supporting special education staff. That is why there is a need for building collaborative teams throughout the state.

Recommendations

The findings from this study do suggest that Oregon's students can benefit from use of performance assessment tasks in supported education classrooms. The important next question is how to move forward in a responsible manner that supports teachers and students. This section develops a number of recommendations of next steps to seize upon the findings to positively impact classrooms for all students. These recommendations are:

1. A new study should be conducted to work with teams of regular and special educators to more effectively integrate IEP goals and objectives with the performance assessment process. IEPs are a wonderful source of information for teachers considering the needs of individual students while preparing performance tasks. Specific student learning objectives can clearly lead to potential modifications and adaptations of curriculum. Conversely, scoring results from performance assessment tasks will often point to specific learning needs that can be specifically addressed during IEP review meetings.

2. More training of supported education and regular education teachers should be provided to develop teacher teams who can work effectively together on performance assessment. Developing effective and supportive teams should be a high priority for the outcome of this training.

3. In addition to specific training of supported education teacher teams, we recommend more workshops and presentations on performance assessment be sponsored to expose as many teachers as possible to its effective use in varying classrooms. We strongly advocate the continued practice of supporting practitioners to not only attend workshops, but to be involved actively in the planning and presenting for such events.

4. We recommend that the Oregon Department of Education and local schools develop cadres of teacher trainers to work at their schools to train other teachers. A strong staff development effort is needed to successfully impact the number of teachers necessary to make a significant difference in teaching practices related to performance assessment.

5. More study is needed to better understand the effects of specific adaptations and modifications to instruction on student performance assessment scores. This information can prove invaluable to large numbers of future supported education teacher teams working to efficiently meet the needs of all their students.

6. We recommend that as CIM standards are adopted they continually be analyzed for their effects upon the success of students with IEPs. Many important issues exist around the setting of standards including the rules about the proper and allowable role of adaptations and modifications to provide equitable assessment of each students performance capabilities.

7. Higher education institutions in the state of Oregon should integrate performance assessment methods into their pre-service instruction on supported education concepts. New teachers need a solid exposure to performance assessment before they begin their practice.

8. We recommend the state of Oregon establish a Performance Assessment Resource Center to assist supported education schools to coordinate training and information dissemination. Such a center could a) provide training, b) fill a clearinghouse function for performance assessment materials, and c) develop an Internet website to make information electronically accessible and to facilitate dialog between schools.

DISSEMINATION/IMPACT

The results of this study will continue to be disseminated in a number of different ways. A statewide training workshop will once again be sponsored by the project this spring. Seventy five regular and special education teachers attended the workshop in May 1996. A large number of participating teachers from the project presented their results at that workshop. Presentations at national and regional professional conferences are another source of dissemination of project findings. A presentation was well attended and received at this years national TASH Conference.